

Smiley

Teaching Guidelines

Blissymbolics
Communication
Foundation

November 1975



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Blissymbolics Communication Foundation



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BLISSYMBOLICS COMMUNICATION FOUNDATION

SYMBOL TEACHING GUIDELINE

(November, 1975)

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SYMBOL TEACHING GUIDELINE

SECTION 1

INTRODUCTION

This teaching guideline is intended as an adjunct to the Ontario Crippled Children's Centre Symbol Communication Research Project Workshops. It is written in the hope of providing a preliminary framework within which the new symbol teacher can plan a meaningful symbol learning programme. Development of a comprehensive handbook for teachers, parents and administrators remains an objective of the next phase of the research project.

It is assumed that any person embarking upon symbol instruction with a child recognizes the value of communication to the young child. The frustrations and limitations imposed upon a child who is unable to use speech functionally are well known by those who relate with him. Prior to the introduction of symbols however, it may be well to consider the contribution of speech to other aspects of the child's development, so that the planning of symbol instruction will not be too limited in its objectives.

Long before learning to read, the young child utilizes language to gain information and test his ideas about his world, to interact socially, to release emotional tension, to express his feelings to others, to role-play and gain insight into himself and others, to give form to imaginative and creative explorations, to develop body and spatial awareness as well as to relate information to others and to satisfy immediate physical needs.

Language enables the child to develop cognitively, socially and emotionally. (Figure 1)

In introducing symbols to a child, the teacher should plan for symbols contributing to all the areas illustrated in Figure 1. Speech has value as it enlarges the child's world; such can be our goal for symbols.

Reading has not been included as a communication medium for the young child, for it is only at a later stage in the child's development that reading can contribute to his cognitive, emotional and social life. Symbols as a substitute for speech can provide the early foundation upon which the more advanced communication skills of reading and writing (or typing) can be built. (i) (For a consideration of the relationship between symbol use and reading readiness see Educational Appendix - Symbol Communication Research Project (1972-73 Report). Upon this foundation of secure interpersonal communication, reading and typing can contribute to an ever expanding awareness and knowledge of self and the world. (Figure 2)

.....

(i) Recommended reading:

Smith E. Brooks/Goodman K.S./Meredith R; Language and Thinking in the Elementary School; Holt, Rinehart & Winston, Inc. 1970

Through Language (Speech or Symbols)

Child is able to:

- * Test ideas
- * Acquire information
- * Ask questions
- * Grow in ability to generalize and use abstract symbols.
- * Participate in imaginative and creative explorations.
- * Develop values, beliefs, attitudes.

COGNITIVE DEVT.



Child is able to:

- * Relate with adults
- * Relate with peers
- * Role-play
- * Devt. of self-image
- * Devt. of awareness of feelings of others.
- * Progress beyond egocentric stage

FIGURE 1

Child is able to:

- * Release emotional tension

- * Express feelings about self and others

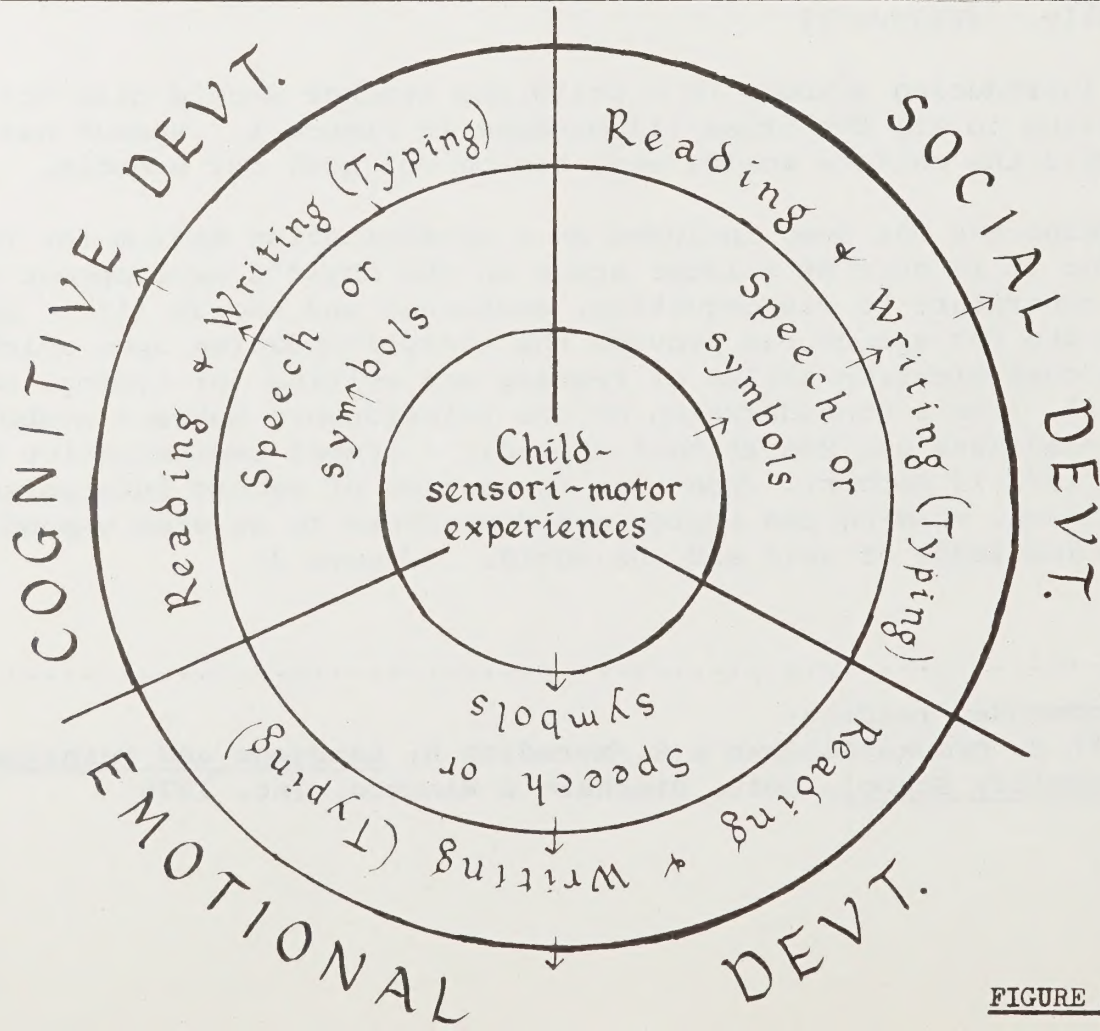


FIGURE 2

In this teaching guideline the term teacher is used to designate the person directly responsible for the planning and implementation of symbol instruction, recognizing that this person may be a professional teacher, speech pathologist, therapist, parent, or interested volunteer. A general outline will be given for the teaching programme; it is hoped that each teacher will adapt and innovate to meet the needs of each child's unique communication capabilities, background of knowledge, and learning style.

Before embarking upon a symbol programme there are two very important questions to be asked:

1) "ARE SYMBOLS APPROPRIATE FOR THIS CHILD AT THIS TIME?"

To give a responsible answer, the following factors selected by the Symbol Communication Research Project Psycho-educational consultant, Barbara Kates, and Speech Pathologist, Esther Timpany, should be considered with each child:

- level of functional speech and potential for speech
- present means of communication
- learning potential
- developmental level
- age
- hearing acuity and perception
- visual acuity and perception
- level of language comprehension
- desire to interact with others
- ability to make decisions (does he have a consistent and reliable "yes/no" response?)
- extent of physical handicap and its effect upon access to a symbol display
- interest in symbols and anticipated motivation in using symbols as a mode of communication (of particular importance for the older child)
- degree of home and school capability and willingness to accept, teach, and use symbols.

Based upon observation of children referred for symbol instruction by the Ontario Crippled Children's Centre Communication Assessment Conference, it is felt that any one of the above factors is capable of negatively affecting the child's symbol readiness when severe limitations are present. If your experience and training does not equip you to assess any of these areas, seek the assistance of the appropriate professional. Before deciding for or against symbol instruction, you should be convinced that symbols are the most appropriate form of communication for your child at this stage in his development.

2) The second question to ask is: "WHAT PERIOD OF TIME SHOULD BE DESIGNATED FOR INITIAL TRAINING BEFORE DECIDING WHETHER OR NOT SYMBOL USAGE IS A REALISTIC GOAL FOR THIS CHILD?"

Because of the wide spectrum of situations and learning styles the times selected will vary, but care should be taken not to judge progress too early. For a child inexperienced in actively initiating communication, several months may have to be allowed for adjustment to the new role required of him.

At the time of writing, the Ontario Crippled Children's Centre Symbol Communication Research Project is about to enter a 2 year evaluation phase in which the symbol vocabularies will be field tested in over forty settings. The data re children's performance and the instructor's evaluation will provide information for the production of standard vocabularies and a Handbook for parents, teachers and administrators. The following remarks are tentatively offered on the basis of two and a half years of experience with symbol learners.

INTRODUCING SYMBOLS TO CHILDREN

GENERAL CONSIDERATIONS AFFECTING PLANNING

A distinction must be made between teaching symbols to a child and communicating with a child through symbols. It is important that a child's learning programme be planned and that responsibility for it be taken by one person; it is equally important that the child communicate through symbols with many interested and accepting persons. Initial planning by the teacher should include arrangements for helping the adults and children who relate with the child to feel confident and comfortable responding to symbols. Their role should involve enjoyable conversation with the symbol-using child, giving feed-back to him as his symbol utterances are understood and providing a model of spoken English as they relate naturally to the child.

The teacher is responsible for providing the child with information regarding the potential of the symbol system. She can utilize several approaches. Formal direct teaching experiences can be useful in introducing the child to symbol meanings. As the child gains in symbol fluency, the model provided by the teacher's symbol output and the informal learnings which occur during conversations become more important. The on-going balance between the three approaches will be influenced by the child's previously acquired knowledge, his learning style, and his level of symbol proficiency.

1. Symbol learning and conversation should be enjoyable, sociable and at the child's interest level. If repetition is necessary, varied experiences should be planned in which the child has the opportunity to use the new symbol or skill frequently in an interesting and meaningful context.
2. Symbols provide a vehicle for communication. The value of knowing a symbol comes in its application. As soon as a child knows a symbol meaning, situations should be planned in which he can make functional use of the new symbol. This does not mean constructing symbol work assignments or devised games; it does mean planning situations in which it is important to the child to impart or gain information through using the new symbol. Feed-back from the other person is essential to his learning.
3. Symbol acquisition provides the opportunity for related learnings. Clarification of concepts, increased understanding of relationships between concepts, expansion of classifications become possible as the teacher introduces learning activities in which the child can utilize newly acquired symbols to expand his knowledge and develop cognitive skills.

Learning the meaning of the symbols may be the easiest part of the task. Using the symbols purposefully may take much longer. The amount of repetition and practice required varies greatly. The teacher through establishing an initial trial period of several months as part of her planning, can ensure that the programme is not discontinued prematurely when the child is slow to make initial progress.

The symbol vocabularies which are presented in this guideline have been developed by the Symbol Communication Research Project Linguist, Oliver Mott, in conjunction with the Ontario Crippled Children's Centre, Symbol Communication Research Project Team. The symbols are derived from those of Charles K. Bliss in Semantography Blissymbolics. (1) Whenever possible they are being used in their original form. New symbols have been devised or modifications have been made:

- (1) in cases where a symbol which children need was not presented in Semantography.
- (2) when the children's restricted vocabulary (imposed by the Children's physical limitations) necessitated developing an extended meaning for the symbol, or when the Ontario Crippled Children's Centre Team considered that the symbol appearing in Semantography was inappropriate for the young child (e.g. not easily remembered, not within the child's conceptual framework, visually difficult.) Where a symbol is not to be found in Semantography, this will be indicated in the dictionary. Every effort has been made to remain as consistent with the Bliss Symbol System as is compatible with the learning ability of the young child.

Teachers and advanced students are encouraged to extend their knowledge and use of symbols by reading Semantography. (1) The symbol simplification and selected vocabularies, which have been developed for initial presentation and use by the young child, can easily be extended to encompass the original Blissymbolics as the child matures. The teacher or student who pursues Bliss' philosophy to enrich his symbol language is promised a fascinating and ever-evolving experience.






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- (1) Semantography-Blissymbolics - For the initial inspiration and symbol source for the symbols referred to herein, see the text Semantography-Blissymbolics by C.K. Bliss. Many of the symbols and procedures used herein have however been independently amended or conceived, for use in a teaching program for non-communicative children, by the writer or the staff of the Ontario Crippled Children's Centre, Toronto, and in many cases may not be in accordance with the Bliss system. For authoritative reference to the Bliss system and for copies of Semantography write to:

**BLISSYMBOLICS COMMUNICATION
FOUNDATION
862 EGLINTON AVENUE EAST,
TORONTO, ONTARIO
CANADA M4G 2L1**

Physical limitations which will affect the child's communicative potential must be considered during the planning stage in order that realistic expectations can be made. The degree of physical handicap will dictate the type of symbol display (and the number of symbols) to which the child can have direct access. Decisions re the appropriateness and availability of electronic displays and the use of hand, foot, eyes, or head to indicate symbols, and decisions re the child independently indicating all the symbols available to him versus utilizing the efforts of the person relating with the child to indicate some or all of the symbols, must be made. The anticipated number of symbols and speed of indicating symbols will influence the direction of instruction.

In introducing symbols to the child, the most relevant symbols should be selected first. In the Ontario Crippled Children's Centre class situation, the introductory vocabulary of 30 symbols (see Page 90 1972-73 report) was introduced first, but for individual children in other settings a personalized selection should be made. If a child already utilizes gestures to impart information, he can be taught a Bliss symbol that corresponds with a gesture, thus relating the communication potential of the symbol with that already known through gesture. Symbols which offer new communication possibilities to the child, should also be taught early in the programme.

SUGGESTED STEPS FOR THE TEACHER TO FOLLOW IN INTRODUCING SYMBOLS TO THE CHILD

1. Become familiar with the symbols of the 100 vocabulary. Be aware of whether the symbol portrays meaning through looking like the object,  house or through representing an idea,  happy or through a combination of both.  television Study the meaning of the component parts and the manner in which new meaning is derived in compound symbols. (see the accompanying dictionary.)
2. Select two symbols (of the basic 30 symbols, or individually selected symbols) to introduce to your child. Present them in large form (playing card size) on child's tray or give to the child to carry with him. Choose nouns, adjectives, "yes/no" as first symbols. Select on basis of interest, immediate usefulness to child, and ease of recognition.
3. Explain and demonstrate the meaning of symbols and give the child an immediate opportunity to use the symbols to enter into conversation with you. e.g. 1. If first symbols are  man and  lady
 - a) Go for a walk and have child indicate the sex of each person he meets.

- b) Look through photo-album
 - c) Say names of persons known by child; have him state λ or Δ
man lady
2. If symbols are $\heartsuit\uparrow$ $\heartsuit\downarrow$
 happy sad
- a) Ask child "How do you feel if....."
 - b) Look at a picture book, describe feelings of persons viewed
 - c) Tell child a story; at intervals in the story, stop and ask how the character is feeling.

Be sure the child understands the object, feeling or action which the symbol represents. Provide experiences to teach the child the concept whenever this is necessary. e.g. in teaching symbol for λ , present the child with enough examples of man, that he knows the symbol represents more than one man. Be sure the child distinguishes between man and woman, that he realizes a person is a doctor and a man or woman, that a person is still λ regardless of age (grandfather), etc.
man

- 4. Provide opportunities for frequent practice and review of the new symbols.
- 5. If child successfully distinguishes between the first two symbols and uses them correctly the following day, introduce two more symbols in the manner described in 3.
- 6. Review and use all symbols introduced. If child has difficulty distinguishing the first two symbols, postpone their use and introduce two other symbols. If your child continues to have difficulty, re-assess his readiness for symbols.
- 7. When the child has a vocabulary of 8-12 nouns or adjectives, introduce pronoun "I" and verb "to want" $\heartsuit\{$ or $\heartsuit+!$ "to like". Demonstrate how he can sequence 3 symbols to make a full sentence. e.g. "I want food" : λ $\heartsuit\{$ \circ , and encourage him to make a sentence whenever possible. Write the sentence on graph paper, blackboard or overhead projector so the child will see the sequence of symbols.
- 8. Introduce the body parts, and then the action indicator. Demonstrate to the child how a body part is able to represent the action of a part of the body when the action indicator is indicated prior to the symbol. When

writing these symbols, place the action symbol over the body part to conform with other verbs. Give the child many experiences following which he can say,

"I see _____."

"I smell _____."

"I hear _____."

9. Show the child the symbols in locations other than on his tray to be sure he is not remembering them by position only. There should be consistency in the location of symbols on the tray for communication purposes, however minor modifications in the arrangements of the symbol is to be expected as new symbols are introduced.
10. If the child is able, encourage him to manipulate the cards, placing them in sentence form.
11. When the child uses correctly 20-30 symbols, introduce the 100 symbol-vocabulary.

INTRODUCING THE 100 SYMBOL VOCABULARY

1. Give the child practice in locating position of symbols already learned.
2. Continue to have conversations using these symbols. Continue writing the child's symbol sentences for him to see.
3. Once the known symbols can be easily located, plan lessons in which you will introduce 1 or 2 new symbols. Incorporate them immediately into conversation.
4. Each lesson, give the child the opportunity to ask for a new symbol of his choice. Teach procedure what? followed by symbol being requested. Review the following day.
5. Adjust pace of introducing new symbols to child's learning ability.
6. Plan to give special attention to the following teaching units in attaining mastery of the 100 vocabulary:

-questions. This area requires much work and will need attention throughout the child's symbol training.

-manners

-Feelings

-use of "opposite" (for those children who can be introduced to or who already understand the concept) If child is not ready to use "opposite" the required symbols can be temporarily added to the display. e.g. happy and sad; big and little

-use of plural (i)

-use of "action" symbol to form verbs

.....

"plural" symbol, "action" symbol, and "descriptive" (evaluation) symbol are written $\frac{1}{4}$ size and above symbol they refer to. (See section "How to Draw Symbols")

- pronouns: I, you
- importance of direction of arrow - e.g. happy, afraid
- importance of size - e.g. mouth, sun

7. Provide the child with demonstrations of the way in which symbols represent a range of meanings through your examples. Translate symbols using their different meanings: e.g. big, huge, "giant", large.

200 VOCABULARY

The 200 vocabulary was designed to serve (1) as a functional vocabulary for children for whom access to a larger number of symbols was not feasible due to either physical or mental limitations and (2) as a transitional vocabulary for children needing a bridge from 100 symbols to 400 symbols. As well as expanding the number of adjectives, verbs and nouns available to the child, the 200 vocabulary introduces tenses, the negative, some prepositions and adverbs, the alphabet, (this can be added to the 100 symbol vocabulary if the child is ready for it,) "yuk" and "wow", the conjunction "and", 2 geometric shapes, the possessive, and symbols which provide for the use of symbol strategies to expand the information which can be expressed, "symbol", "part", "like", "similar to", "combine" (see symbol strategies section).

400 VOCABULARY

The 400 vocabulary attempts to provide an expanded vocabulary which through use of symbol strategies, a supplementary personal dictionary and alphabet skills (initial consonants, spelling) will allow the child to express himself fully.

LEVELS THROUGH WHICH CHILD MOVES IN BECOMING FLUENT WITH SYMBOLS

- (1) Learning through experience that symbols can fulfil the same function as speech:
 - a) testing how adult organizes his world (e.g. "Am I naming, classifying, or describing as you would"?)
 - b) testing communication medium - (e.g. "Can you understand, when I say it this way"?)
 - c) communicating - (e.g. "I want to tell you this".)
- (2) Learning the symbol-meaning-relationship for each symbol in the vocabulary.
- (3) Learning that one symbol represents a range of meanings.
- (4) Developing speed in locating the symbols.
- (5) Learning to use symbols effectively and purposefully to communicate.
- (6) Learning morphology - recognition and utilization of symbol components.
- (7) Learning to create individual symbols; learning to play with, explore and enjoy language.
- (8) Developing the ability to utilize a variety of symbol strategies (methods of combining symbols-both Blissymbolics and alphabet.)

ASPECTS OF SYMBOL LEARNING WHICH ARE ONGOING THROUGHOUT INSTRUCTION

- (a) Gaining skill in becoming spontaneous and automatic in symbol responses.
- (b) In conjunction with the instructor, exploring and developing techniques of symbol presentation which will enable the child to improve his ability to transmit his meaning to others.
- (c) Being exposed to an adult model of English Syntax (1) continuously through the speech of others (2) through symbols being pointed to or written, by others.

TEACHER RESPONSE LEVELS

To enable the child to progress in his level of symbol output, the teacher must be aware of and move through different levels of responding. She must remember that there is a distinction between teaching and communicating. Those adults not familiar with the symbol system will communicate with the child in the manner most comfortable to them. The child will in time learn to adjust to a variety of methods of responding. As teacher, you are interested in his development of skill in symbol output. Your response level will be planned to meet his language needs.

Help the child move through the stages which follow; avoid placing him in a situation where your response level may be too difficult for him.

1. When introducing and working with separate symbol cards, accompany every symbol indicated by the child with your saying of the word; each time you say a word accompany it with pointing to or writing the symbol.

2. When child is beginning to indicate short sentences:
 - a) say the meaning which is printed on the display as the child indicates each symbol e.g. MAN.....SEES.....MOTHER
 - b) Repeat the meanings of the individual symbols in a series e.g. MAN SEES MOTHER
 - c) Expand the meaning to give an English sentence "The man sees mommy
 - d) Refine the sentence to a form which is acceptable to the child.
e.g. "A man saw mommy".
 - e) Ask for further information through symbols or yes/no replies and expand the sentence more, if appropriate. "The principal saw mommy on the way to the classroom to-day."

The child needs feed-back as to symbol meanings, the added meaning imparted as symbol becomes part of a sentence, and the use which teacher can make of context in order to arrive at an expanded meaning. As soon as the child is familiar with the word-symbol association presented on the display, alternate meanings should be expressed, so the child will learn to relate to the range of meanings expressed by the symbol. With each extension of meaning, the teacher has the opportunity of language and cognitive development activities.

3. As the child becomes secure in symbol-meaning relationships, the teacher can begin to wait for a phrase unit to be completed by the child and then verbalize the child's output utilizing context and syntax clues to arrive immediately at the expanded sentence form. The teacher must be sensitive as to the time when each child no longer requires reinforcement of the individual symbol-meaning relationship. An alternate response by the teacher at this stage, is refraining from any verbalized repetition of the child's output and proceeding immediately to a reply to what the child has "said".

4. At all stages of relating with the child, a written record of the child's symbol output can be useful both for the teacher and child. Seeing the sequence of symbols can relieve the strain on short-term memory and can free the teacher to concentrate on context and syntax clues. She can then respond in a more relaxed manner.

5. On appropriate occasions, the teacher can utilize symbols to converse with the child, either through using the child's symbol display or through writing the required symbols. Speech on the part of the teacher, should always remain an integral part of communication with the child however, due to its speed, clarity, and naturalness for the teacher.

6. When the child is unable to make himself understood, it is important that the teacher, in a non-critical way, make the child aware of the need for an improved output. It does not help the child if the teacher pretends to understand or begins guessing as to the child's intent. The teacher can begin by asking the child to tell her in another way. If this is not successful,

then the teacher can structure the situation so that the child's output gives relevant information. The teacher can suggest alternatives such as "what kind of a thing is it?" "what is it used for?" "what is the most important thing about it?" or with regard to an event "tell me what happened" etc. Working together on clarifying the child's symbol output can help the child arrive at independent use of symbol strategies and will strengthen the child's ability to select alternate levels of communication when he relates with persons differing in their knowledge of the symbol system.

SYMBOL STRATEGIES

1. The first symbol which allows the child to expand his vocabulary is the "opposite" symbol. It can be effectively used with adjectives and adverbs and can help clarify many concepts for the child as he uses it. Care should be taken when the child uses "opposite" in conjunction with nouns, however, for he may not know the full adult meaning of the noun and may be using the "opposite" to relate to a feature which is not a criterial feature for the adult. This could lead to ambiguity. e.g. If the child says "opposite of car" to refer to "bicycle", he may be relating the "opposite" to the size feature where the adult would tend to relate the "opposite" to the classification feature of vehicle.
2. "Like" or "similar to", "same as" and "part of" are other symbols which the child can learn to use effectively to expand his vocabulary.
e.g. To refer to a robot: "like a man and a machine"
To refer to a blast: "loud the same as thunder"
To refer to one's finger "part of hand beginning with f"
3. A very useful strategy which allows the child to create new symbols is made available through the "combine" symbol. By pointing to this symbol the child can indicate he is about to use several symbols to form a new symbol combination which will represent a new meaning. Thus "outside food" means "picnic", "make-believe lady who flies in the sky" means "witch" etc. The "combine" symbol is indicated both before and after the sequence of symbols to enclose the new combined symbol.
4. "Symbol part" and "symbol position" may prove useful on the rare occasions when a child requires the meaning of a symbol which is part of a compound symbol, e.g. to say "note", the child could point to "music" and "symbol part" or when he requires a change in a symbol position in order to arrive at a new meaning. e.g. "little" "water" "symbol position" "earth" could indicate "puddle".
5. "sounds the same" can be used to indicate that one is utilizing a symbol to indicate a meaning represented by a word which sounds the same rather than to refer to the range of meanings represented by the symbol. e.g. "sea" sounds the same as "see", "flour" sounds the same as "flower".

SYMBOLS FOR THE SEVERELY INVOLVED CHILD

Special consideration must be given to the communicative style of the severely involved student. In order to gain a perspective re the type of instruction and the results to expect, the following comments by Judie Barlow, Ontario Crippled Children's Centre classroom teacher, are included. It is hoped that her section on strategies will serve to emphasize the need of the severely involved child for guidance in developing special communication techniques.

"With the highly involved child, symbol education moves at a pace directly geared to the youngster's rate (speed) of symbol output. In the 1973-74 symbol class, I have planned all learning experiences with this in mind:

Severely involved children talking on boards containing 200 symbols do so slowly. Not always, in fact rarely, do they use sentence structure in the course of natural give-take conversation. With these two facts as points of departure it is possible to organize a class routine which will bring symbol communication into constant play.

Each day the children begin work with a warm-up period; they work one to one with a volunteer who records their statements (symbol output). For highly involved children 45 minutes might result in 2, 3 or 4 lines of 4 symbols each. It is the volunteer's job to question, to probe, to ask for catagories, adjectives (describers) go-green verbs etc. all to help reconstruct on paper (where the child can see it) the child's idea. A skilled volunteer does not add to the output, but helps the child locate the most efficient and effective strategy to convey his meaning (usually through penetrating questioning). Consequently it becomes extremely important to invest time in the training of volunteers. In order to know specifically where the child is at in the programme, you (the teacher) must have accurate reporting of the child's ever-changing output. For this reason anyone working on a one-to-one basis with the child must know the various techniques, styles, clues, hints, classifications and pre-determined patterns of English-symbol output being striven for. (See Symbol Stratagies).

After forty five minutes of such semi-private conversation, our group comes together and we share whatever it is each child wishes us to hear (from his earlier time with one volunteer). It is a refining process, for the second output often allows the child an opportunity to alter, elaborate upon and embellish his news. He must also defend it against questions from his peers. As co-ordinator of this group session the teacher is in the position of calling upon others to put demands upon the speaker. She can ask for more symbols, for fuller sentences, and for richer description. She can guide the group in such a way that the other children are putting their minds and symbol boards to work in a joint effort - to accurately "read" the first child's news. In this way cross-conversations emerge. With students, such a period could last an hour; it seems more productive if limited to 30-40 minutes, thereby enforcing a speed of sorts - emphasis on efficient symbol usage to make known a specific meaning.

There are many strategies to be mastered by the child in order to make a mere 200 symbols first functional and then creative.

1. Already covered in the original guideline:
 - "opposite"
 - "similar to"
 - "to combine"
 - "symbol part or position"
 - "sounds the same"
2. As part of a reading readiness programme I would add:
 - (a) sounds like - as in happy, happened
 eye - I
 2 - two

 begins like as in money mouth more
 and ends like as in ' bed red head light night
 - (b) looks like as in birthday holiday Sunday Saturday

 Father Brother

 (drawing attention to identical
 symbol components)
 - (c) Regular use of left and right techniques (for reading of eyes, hands and boards)
 - (d) ^ action to indicate verb
 - (e) v to convert symbol to adjectives or adverbs
 - (f) Alphabet (both cases) for detailing descriptions for more specific meanings
 - (g) Plural for clarity of meaning
 - (h) Tenses as above
 - (i) in questioning, use a regular technique - always asking detailed information
 about feelings, actions, size, shape, colour, comparisons - All of this questioning is aimed at helping the child build his skills related to classifying material.
 - (j) Use of synonyms for each symbol in order to bring home the concept of many meanings for each symbol.

Finally, these children need to know how to use and to be comfortable with a telegraphic style. Each youngster, as he is exposed to symbols, tends to develop a personalized method of symbol output. Much of what we refer to as telegraphic communication is a natural style coming from each child. Such styles are as varied as are the children. Consequently after the youngster has worked with symbols for a brief period he may need to be helped to organize his thoughts within a somewhat structured framework. Briefly he should learn to use the "?" when needed as a clue to what's ahead, he should realize the significance of verbs as major means of expression and of time or tense as equally important when accuracy of output is needed."

SUMMARY

The progress which each child makes will be influenced by factors relating to the child's learning capabilities and to the learning situation. If the teacher carefully decides upon the suitability of symbols and then arranges, through a well planned and regular symbol instruction programme, a range of experiences in which symbol use is functional and rewarding, a stress-free and motivating learning environment, contact with accepting adults, and opportunities to relate with peers, she will be giving her child the opportunity to develop his unique communication, social, emotional, and cognitive potential. An exciting and rewarding experience awaits child, teacher and family.

HOW TO DRAW BLISS SYMBOLS.

The symbols appearing in this paper have been drawn by Jim Grice, draftsman, O.C.C.C. Instructions have been written by Margrit Beesley, O.T. Reg., with added comments re symbols by C. K. Bliss, May 1974.

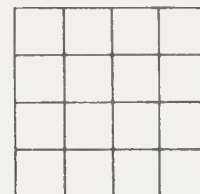
In order to draw symbols in their proper size relation, it makes it much easier if one remembers that each symbol fits into a basic square. The square can be divided into halves, quarters and eighths.

It is of great assistance if you start with pre-lined graph paper in drawing symbols. This type of paper helps keep the right size relationship in drawing, which is essential, otherwise the symbols can lose their proper meaning and the reader can get confused.

In the following pages, only 1 inch symbols are shown - $\frac{1}{2}$ " and $\frac{1}{4}$ " symbols can also be drawn. Use of template (design available from O.C.C.C.) is recommended by C. K. Bliss. This template can be made out of thin plastic or celluloid and the symbol components should have a size relative to the graph paper.

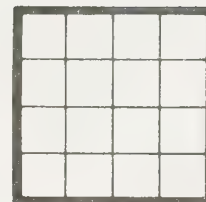
When drawing symbols to be used for instruction or attaching to a display board, they should always retain their proper size relationship and be drawn with an exactness that free hand drawing cannot attain.

FOUR SQUARES TO THE INCH -
TO DRAW 1" SYMBOLS

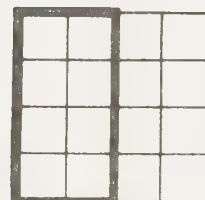


SOME BASICS ABOUT SYMBOLS.

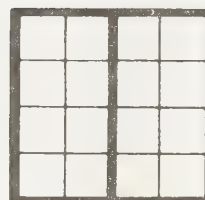
AN ENCLOSURE USES ONE COMPLETE SQUARE



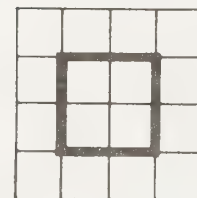
A PAPER OR PAGE IS HALF A SQUARE,
showing the usual format



A BOOK HAS A LINE THROUGH THE MIDDLE,
showing the book open and two pages



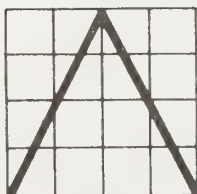
A THING - QUARTER OF A SQUARE IN THE MIDDLE.
The symbol pictures a cube crystal.
It symbolises the noun.



THE IMPORTANCE OF POSITION

Example for the Verbal Noun, the Verb, and the Verb Indicator:

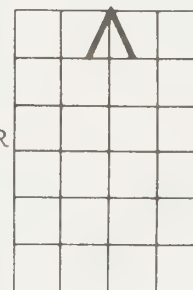
ACTION
VERBAL
NOUN



TO ACT
VERB



USE THE
ACTION
INDICATOR
TO MAKE
A VERB

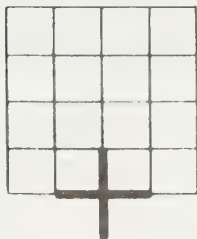


"The symbol pictures a volcano cone, first primeval Action
on our young earth." (C. K. Bliss)

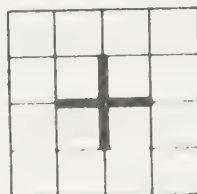
IMPORTANCE OF POSITION (Continued)

Example for the Particles containing the Plus Meaning:

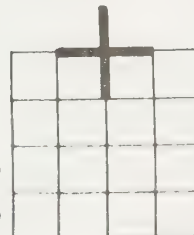
BELONG
TO



AND
TOO
ALSO

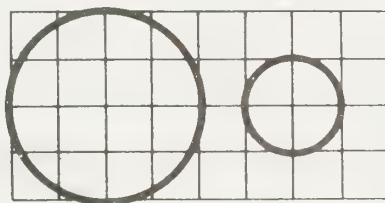


WITH
THE HELP
OF



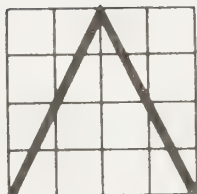
THE IMPORTANCE OF SIZE

SUN



MOUTH

THE SYMBOL
FOR ACTION

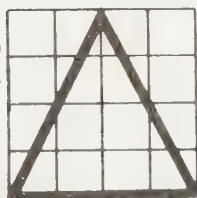


REAPPEARS IN THE SYMBOL
FOR MAN "to whom Action,
Endeavour, Success make
Life worth living"
(C. K. Bliss)

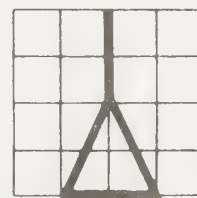


THIS SYMBOL
FOR CREATION

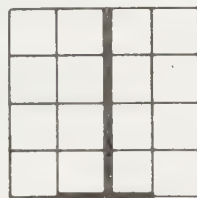
"is the old Greek
symbol for LOGOS
the Creator."



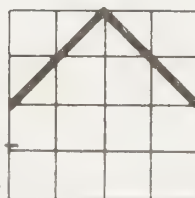
IT REAPPEARS IN THE SYMBOL
FOR WOMAN "who is the Trus-
tee of the Creator. Within
her womb God creates a new
Creature". (C. K. Bliss)



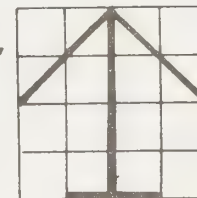
A HUMAN-EITHER
SEX, SHOWS AN
UPRIGHT STANDING
HUMAN BEING



A ROOF,
SHELTER
means
also Pro-
tection



A PARENT,
EITHER
SEX, WHO
PROTECTS
HIS FAM-
ILY



SYMBOLS ARE EASY TO REMEMBER



Eye

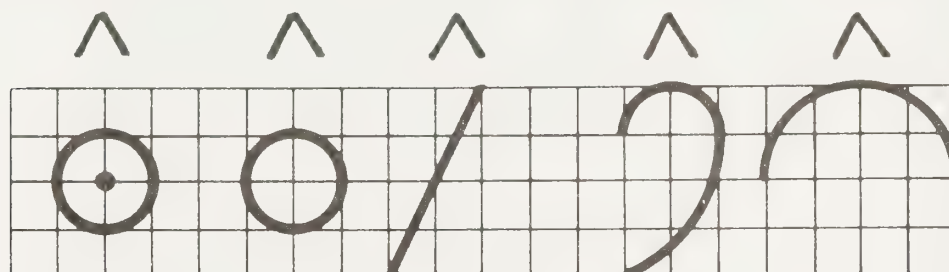
Mouth

Nose

Ear

Brain

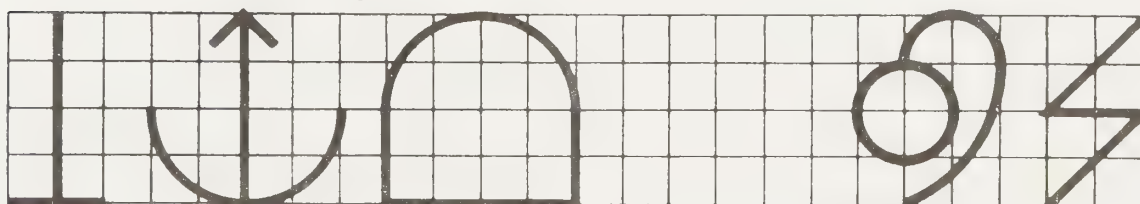
By putting the verb indicator on top of these symbols we get:



to see,	to speak,	to smell,	to hear,	to think,
observe,	talk,	sniffle,	listen,	consider,
look,	voice,	etc.	etc.	muse, etc.
etc.	etc.			

HOW TO WRITE COMBINED SYMBOLS

In between each symbol element is a space equal to $\frac{1}{4}$ of a full square.



TEACHER

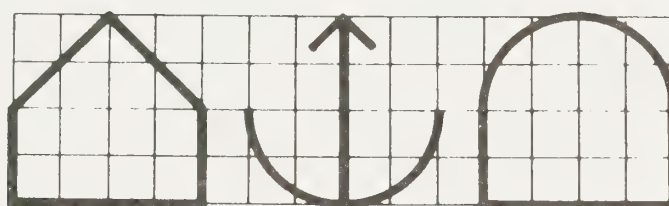
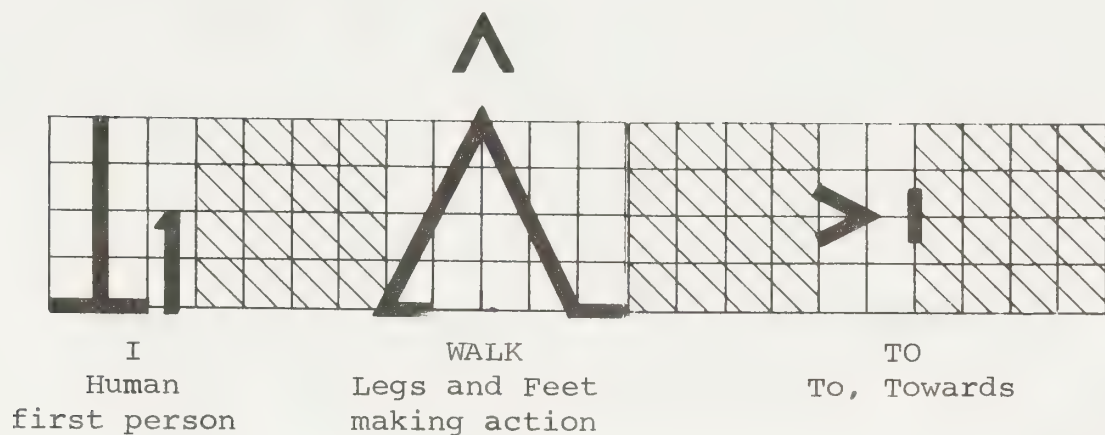
"A human who gives out knowledge
from an imaginary vessel contained
in the brain
enclosure"

TELEPHONE

"Language
by mouth
and ear"
"Electrically
the zigzag out-
line of a
lightning"

(C. K. Bliss)

HOW TO WRITE A SENTENCE



House	"Gives out of an ima- ginary vessel"	"Knowledge contained in the brain enclosure" (C. K. Bliss)
-------	---	---

Between two symbols, no matter what their size, there must be one full square left blank to indicate the separate words.

The right spacing is important.

Correct spacing, proper positioning, exactness of drawing and of size are all important; care taken in the drawing of symbols will contribute to the fluent reading of symbol communication.

B L I S S Y M B O L I C S

TEMPLATE DESIGN BY C.K. BLISS

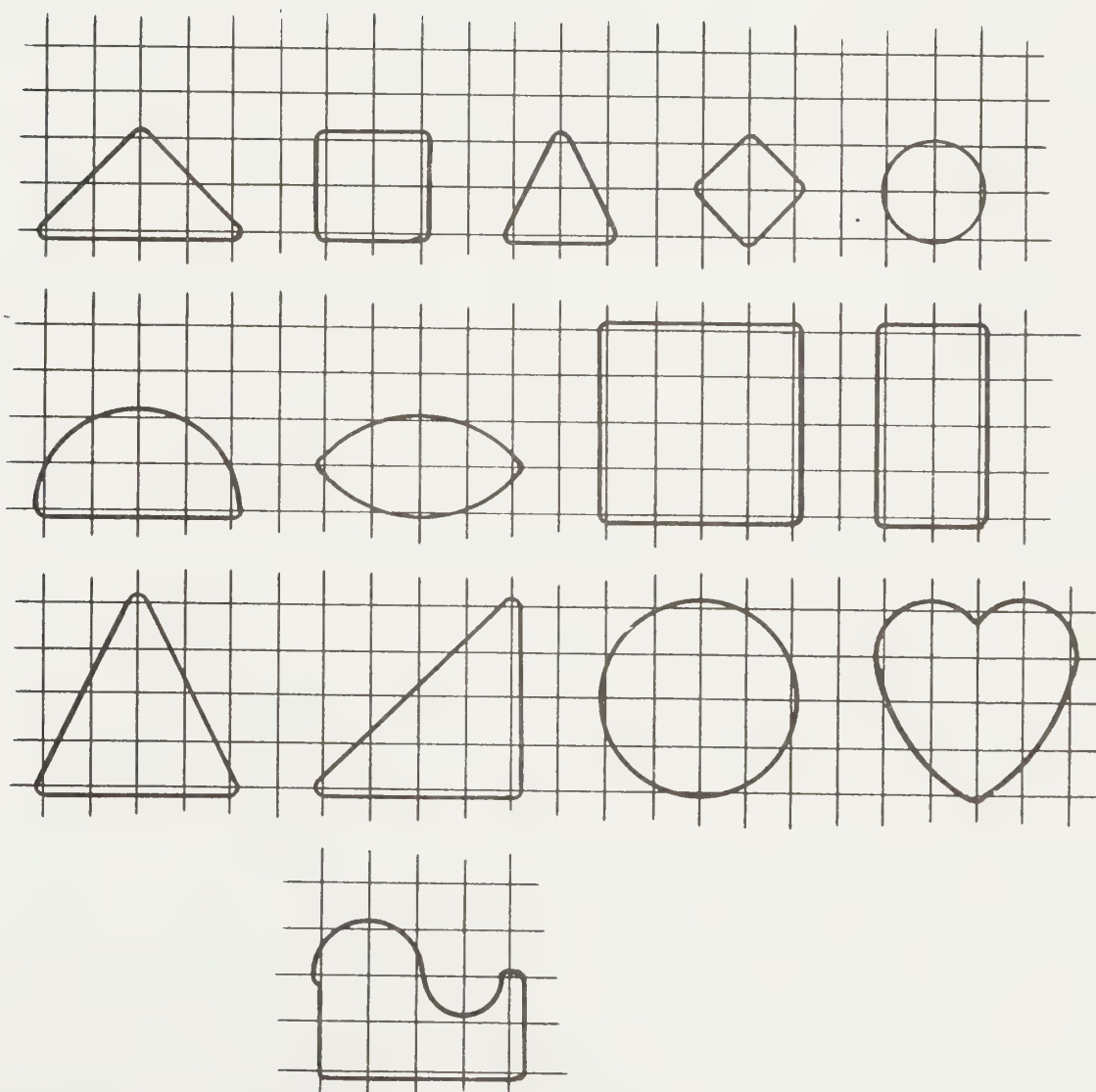
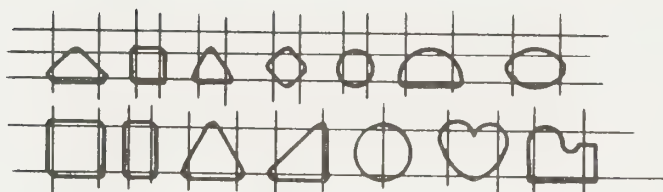
The template has been drawn to be used with $\frac{1}{4}$ " graph paper.

If the template is produced exactly the size of the attached plan, the symbols drawn by pencil will fit the graphed sheet.

The two sizes of template have been drawn to provide the instructor with large demonstration and introductory symbols, as well as small symbols for recording children's symbol output.

For detailed instructions on using a template, refer to The Book To The Film Mr. Symbol Man, by C. K. Bliss, page 31, available in May, 1975.

BLISSYMBOLICS TEMPLATE DESIGN



SUGGESTED COLOUR CODE FOR VOCABULARY DISPLAYS

This colour code is a tentative scheme currently in use in the Ontario Crippled Children's Centre Symbol Communication classes (December 1975). It is under study at the present time.

Use of coloured pencils or self-adhering coloured film is advised.
Two trade names of colour film: letrafilm and geo-color.

COLOUR CODE FOR COLUMNS	YELLOW	GREEN	BLUE	ORANGE	REMAIN WHITE
400 Vocabulary	c, d, n, o, 4-19 r, 5-19 s, v, w, 6-19	e, f, g, 10-19 h, 4-19 i, 4-9	k, 4-19 l, m, 5-19 suggested: n, 2	p, q, t, 5-19 u, 6-19	all other areas, incl. grammar section (e, f, g, 4-9)
200 Vocabulary	c, d, 3-12 k, 5-9 l, o, p, s, t, 4-12	e, 6-12 f, g, 3-12	i, j, 3-12 k, 10-12	m, n, q, r, 4-12	all other areas, incl. grammar section (e, 3-5)
100 Vocabulary	c, h, j, 2-10 f, 3-10	d, 2-10	e, 2-10	a, 8 g, i, 2-10	a, b, 2-7 f, 2

Outline numbers in colour as follows: 0-green, 1-remains white, 2-blue, 3-orange, 4-brown, 5-yellow, 6-purple, 7-pink, 8-black, 9-red.

a	b	c	d	e	f	g	h	i	j	
1	0	1	2	3	4	5	6	7	8	9
2	hello O↔←→	[?] question	I ₁ I, me (my)	♡+i like	♡↑ happy	^ make action	⊖ food	/ pen, pencil	I♡+i friend	⊗ animal
3	i♡ please	?▷ why	I ₂ you (your)	♡? want	♡x♡<< angry	○ mouth	⊖~ drink	□ paper, page	⚡ GOD	✕ bird
4	♡↕ thanks	?^ how	Y man	^→I come	♡↕? afraid	⊙ eye	^⊙ sleep	□□ book	🏠 house	♀ flower
5	I ₁ ♡↕ I'm sorry	?I who	Δ woman	^↕ give	♡↕○ funny	Δ legs	h toilet	□ table	🏫 school	~ water
6	1 opposite	?□ what thing	↕ father	^Δ make	♡+i good	↓ hand	♡^ pain	□⊙⚡ television	🏥 hospital	○ sun
7	↕x much, many	?÷ which	↕ mother	^I help	I big	↷ ear	⚡ clothing	👁 news	🏪 store	🌤 weather
8	♫ music	? where	^2 brother	^ think	♡ young, new	∟ nose	Δ↕ outing	÷ word	🏠⊙ show	⊖ day
9		?⊖ when	^2 sister	^⊖ know	♡↕ difficult	⊖ head	⊗ car	⊙ light	□ room	📅 week-end
10		?x how many	I↕ teacher	^ wash	♡<> hot	⊗ name	🚼 wheelchair	□^♡↑ game, toy	🏠 street	🎂 birthday
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

100 VOCABULARY
(December 1975)

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CK Bliss and Exclusive Licensee
Blissymbols Communication Foundation

Blissymbols Communication Foundation
862 Eglinton Avenue East,
Toronto, Ontario, Canada M4G 2L1

1. 10 - 10 = 0

2. 10 - 10 = 0

3. 10 - 10 = 0

4. 10 - 10 = 0

10

CONSIDERATIONS IN ASSESSING
A CHILD'S COMMUNICATION NEEDS

ONTARIO CRIPPLED CHILDREN'S CENTRE
November 1975

Dale Sutherland, M.S.,
Speech Pathologist

Barbara Kates, M.A.,
Psycho-educational Consultant

CONSIDERATIONS IN ASSESSING A CHILD'S COMMUNICATION NEEDS

INTRODUCTION

A communication assessment at the Ontario Crippled Children's Centre is the product of multidisciplinary efforts on the part of Speech Pathology, Education, Occupational Therapy, and Psychology, with consultations from Rehabilitation Engineering and Neurology. This paper is based on the framework of the joint Speech Pathology/Psychology assessment, with reference to the areas where Education and Occupational Therapy enter into the assessment procedures. Since these assessment procedures have been developed at the Ontario Crippled Children's Centre they are based on the assessment of physically handicapped children who have communication difficulties.

The importance of accurately assessing the child's communication needs relative to his current level of communication skills is emphasized. If the child requires an alternative to speech in order to communicate, the appropriate alternative must be selected to avoid failure on the part of the child, frustration on the part of the teacher and disappointment on the part of the parents.

The assessment is following a task analysis approach to looking at symbol learning for communication. The situation provided through the administration of tests allows one to observe the child and assess his level of functioning as it pertains to these factors. While formal standardized assessment devices are used in order to provide a structure for the assessment, there is less concern for the scores which the tests yield and more concern for the observational data which becomes available through the testing situation.

There are two aspects to the assessment: (1) factors which determine the suitability of a symbol program for the child, and (2) factors which influence the nature of a symbol program. In considering the suitability of a symbol program, if symbols are not recommended alternative means of communication would be suggested.

FACTORS WHICH DETERMINE THE SUITABILITY OF SYMBOLS

Desire to Communicate

The first factor that is considered is whether or not the child indicates a desire to communicate. Does the child understand the value of communication? Does he have a "yes-no" response? Is he able to make choices? If the child does not understand that he can

Desire to Communicate...

manipulate his environment through communication, it is important to teach him that concept prior to introducing symbols. This can be done through a medium to which the child is already relating, e.g., objects, pictures. He can learn to make choices in his activities of daily living and in his play. Learning the value of communication should be separate from, and prior to, learning the symbol system, not dependent on a knowledge of symbols.

Developmental Level

Once it is established that the child has a desire to communicate it is important to establish the level of visual materials to which the child relates (referred to as developmental level). The educator provides supplementary information to this part of the assessment. The hierarchical progression of visual materials is as follows:

- actual concrete objects
- representations of objects, e.g., miniatures
- identification of pictures by their names
- identification of pictures by their functions
- meaningful symbols, i.e., Blissymbols
- non-meaningful symbols, i.e., letters of the alphabet

If the child can relate to pictures by their functional uses, an introduction to a few Blissymbols is done as part of the assessment procedure in order to ascertain whether the child can relate to the symbol. This is done first by matching the symbol to the appropriate object and picture, and then by using the symbol to respond to questions. An indication of the child's ability to retain the symbol is also noted. The level of visual materials to which the child relates will determine the communication alternative to be recommended - gestures, pictures, symbols, words. For example, if the child is only relating to concrete objects, his communication system should be based on that medium. In considering a wordboard as the alternative means of communication, the child's ability to communicate should not be dependent on acquiring reading skills but rather dependent on reading skills already acquired. The information as to the child's reading level is supplied by the educator.

FACTORS WHICH INFLUENCE THE NATURE OF THE PROGRAM

Many of the factors considered are the same considerations given to setting up any learning program.

Significant Background Information

General background information is collected concerning the cause of the problem, e.g., traumatic accident or birth injury, and the reason for the referral. It is important to know who made the referral for future planning of a program to meet the child's needs. Any pertinent information re family life at home or life in an institution will determine the type of experiences the child has had and consequently affect the results on the formal assessment tasks which are administered.

Level of Functional Speech

The expressive aspect of speech is under consideration, where the highest level of verbal communication is determined. Is the child communicating with vocalizations, making some attempts at verbalizing single words? How functional is the child's speech? Are the parents and familiar persons the only people who understand the child's speech? To what extent is an alternate mode of communication necessary as a supplement or complement to speech? This may be accomplished from general observations during the assessment and reports from the family and the school.

Potential for Speech

(a) Oral Peripheral:

The oral musculature is examined to detect any irregularities in tongue movements, soft palate, and lips. Diadochokinetic rates are established whenever possible. Feeding problems are queried with parents.

(b) Prognosis:

The prognosis for development of functional speech is considered for both short and long-term development. In determining the prognosis, the results of the oral peripheral examination are considered along with any changes in the level of functional speech over the past two years. In cases where the short-term prognosis is poor and predictions for the long-term development are uncertain, symbols may be recommended on a short-term basis. Symbols may serve as a supplement or a substitute for speech.

PRESENT MEANS OF COMMUNICATION

What is the actual means of communication of the child? Is the child communicating by limited speech vocalizations, gestures, facial expressions, behaviours or some type of communication device, e.g., picture or wordboard? Is his present means of communication commensurate with his communication needs?

LEVEL OF INTELLECTUAL FUNCTIONING

Prior to the child's having an expressive means of output it is only possible to assess him intellectually using gross measures. For a young child the non-verbal parts of the Stanford-Binet Intelligence Scale and the McCarthy Scales of Children's Abilities can be administered, for an older child the Columbia Test of Mental Maturity is generally given. The mental age of the child gives some indication of his rate and style of learning, i.e., whether he is retarded or not retarded. Records of past assessment results also indicate the expectations for learning on the part of the child in the past. Once the child has a more extensive means of communication (i.e., 400 symbols) it becomes possible to do more refined and detailed assessments.

LEVEL OF ALERTNESS

A subjective way of assessing the child's intelligence is to observe how he reacts to his environment. Does he respond to humour in situations? Is he interested in or involved in the surrounding activities? Does he attend or participate in some way? Does he show curiosity?

VISUAL ACUITY

The child's visual acuity is investigated in a gross way. Note is made of the child's ability to focus on and attend to visual stimuli. Attention is also paid to his field of vision, the size of stimuli he can see, the distance between visual stimuli that he requires in order to see them. These factors determine the number, size, placement of symbols on a display. Any questions regarding the child's visual abilities are referred to an ophthalmologist with specific reference to the child's use of symbols on a symbol display.

VISUAL PERCEPTION

(a) Form Discrimination

Refers to the number of shapes the child can discriminate and how fine those discriminations can become. This becomes a guide to the number of symbols that would be introduced at one time, as well as the selection of the symbols.

VISUAL PERCEPTION...

(b) Figure Ground

Refers to the maximum number of visual stimuli presented simultaneously from which a child can select one. This will influence the number of symbols which appear on the display at any one time.

HEARING ACUITY

Whenever possible, a pure tone hearing threshold test is administered. However, due to their severe physical involvement, many of the children require special tests which are not available at the Ontario Crippled Children's Centre on a regular basis. In such cases, it is necessary to rely on earlier reports and gross measures taken with noise makers and the spoken word.

There has been limited experience with applying symbols to children with a hearing loss. However, the level of abstractness required for symbol learning has limited the symbol program to include only concrete symbols where the auditory explanation is not as necessary to the basic understanding of the symbol.

AUDITORY ATTENTION

Auditory attention is assessed through observations of how the child relates to an auditory method of presentation. At this point, it is necessary to consider which modality, visual or auditory, would be the best method of presentation to the child in order to take full advantage of his areas of strength.

LANGUAGE COMPREHENSION

Information from formal language tests is used as another indicator of the child's developmental level. Two specific tests are used, the Reynell Developmental Language Scale, receptive subtest forms A (for children who are able to point), and B (for those with no pointing skills) and the Carrow Test for Auditory Comprehension of Language. The former test deals with objects at a low developmental level while the latter is strictly pictures for a child operating on a higher level.

PARENTAL ATTITUDES

Before beginning a program of symbols it is important to ascertain the attitudes of the parents towards introducing an alternative means of communication. While the suggestion of a symbol

PARENTAL ATTITUDES. . .

program would not be rejected if the parents showed a negative attitude, their feelings do influence the child's attitude to some degree, so that it becomes part of the child's program to educate the parents. Sometimes parents of young children are discouraged by the notion of a substitute for speech and are not yet ready to accept that the prognosis for speech is limited. It is important to deal with these feelings and explain the positive aspects of symbols for speech and language development. Parents of older children who have worked out a limited, but functional, system of communication on their own may not understand the need for a fuller means of communication which can be more readily understood by more people. They may be threatened by this new means; they may also underestimate the communication needs and overall abilities of their child. Parents must also be prepared to deal with the consequences of their child's expanded communication system. They must become prepared to deal with the questions their child may now have the opportunity to ask.

EDUCATIONAL HISTORY

It is important to know the educational programs of the child in the past as well as his present educational program. This is another indication of what the expectations for him have been in the past. The present program also determines the resources which are available in order to implement a program.

FRUSTRATION LEVEL

Related to desire to communicate is frustration level. A child whose desire to communicate is great usually shows great frustration. A child who indicates little frustration may not see the value of communication, or may have become apathetic and no longer have the desire to communicate. It is also important to determine the frustration level of those with whom the child communicates, e.g., family, teachers. Their level of frustration may greatly affect their receptiveness to the recommendation of an alternative means of communication, as well as their motivation to use it.

HAND FUNCTION

Hand functions are examined briefly during the assessment to see whether the child will be capable of fine pointing with one finger or gross pointing with a fist. If hand skills are very limited, what part of the body would be functional to access a symbol display? The Occupational Therapist investigates further any possible areas of strength. The child's means of access to symbols could affect the format of the symbol display. The child's seating is extremely important in assessing means of access to symbols. Careful consideration to stabilization is necessary to develop the use of the most functional part of the body.

MOBILITY

The mobility of the child plays an important part in deciding the type of display to be provided for the child. The mobile child has special needs which need to be met with an easily accessible symbol display. The child seated in a wheelchair does not present the same problems.

At a conference the findings of all the disciplines involved are discussed and joint recommendations are made.

APPENDIX A - ASSESSMENT DEVICES

1. Carrow Test for Auditory Comprehension of Language, Learning Concepts, 250 N. Lamar, Austin, Texas, 78705.
2. Columbia Mental Maturity Scale, published by World Book Co. Yonkers - on - Hudson, N.Y. and Chicago, Illinois, 1954.
3. McCarthy Scales of Children's Abilities, McCarthy, D., The Psychological Corporation, N.Y., N.Y., 1970
4. The Reynell Developmental Language Scales, Institute for Psychological Research, 36 Fleury St. West, Montreal, P.Q.
5. The Stanford-Binet Intelligence Scale, Terman, L. and Merrill, M., Houghton Mifflin Co., Boston, 1960

